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(54) Title: USE OF MONOAMINE OXIDASE INHIBITORS FOR THE MANUFACTURE OF DRUGS INTENDED FOR THE TREATMENT OF OBESITY

(57) Abstract: The present invention relates to the use of reversible selective inhibitors of monoamine oxidase A (MAO-A), reversible selective inhibitors of monoamine oxidase B (MAO-B) or reversible mixed inhibitors of MAO-A and MAO-B in the manufacture of drugs intended for the treatment of obesity.

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# INTERNATIONAL SEARCH REPORT

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## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K31/39 A61K31/16 A61K31/35 A61K31/42 A61K31/425  
A61K31/44 A61K31/445 A61K31/47 A61K31/50 A61K31/505  
A61K31/535

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, EMBASE, MEDLINE, BIOSIS, WPI Data, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 97 13768 A (LECLERC ODILE ; JEGHAM SAMIR (FR); PUECH FREDERIC (FR); SYNTHELABO) 17 April 1997 (1997-04-17) cited in the application abstract page 34, line 7,8 page 41, paragraph 2	1-4, 12
X	WO 96 38444 A (SYNTHELABO ; JEGHAM SAMIR (FR); PUECH FREDERIC (FR); BURNIER PHILIP) 5 December 1996 (1996-12-05) cited in the application abstract page 24, line 1 -page 25, line 19; example 7 --- -/--	1, 2, 4, 6, 12



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

\* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
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- \*&\* document member of the same patent family

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## INTERNATIONAL SEARCH REPORT

International Application No

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 699 680 A (SYNTHELABO) 6 March 1996 (1996-03-06) cited in the application table 1, entry 52-57 page 24, line 1 - page 25, line 19; example 7 ---	3
X	DE 30 15 360 A (MERRELL TORAUDE & CO) 6 November 1980 (1980-11-06) page 11, paragraph 2 - page 12, paragraph 2; example 7 page 22, paragraph 2 - paragraph 2; example 7 ---	1, 2, 4, 7, 12
X	US 3 466 236 A (HOSTETTLER HANS U) 9 September 1969 (1969-09-09) column 1, line 68-71 - paragraph 2; example 7 ---	1, 2, 4, 7, 12
X	US 3 153 092 A (A. BURGER) 13 October 1964 (1964-10-13) column 1, line 10-36 - paragraph 2; example 7 ---	1, 2, 4, 7, 12
X	ZAHM P. ET AL: "Twelve-month oral toxicity study of lazabemide in dogs." JAPANESE PHARMACOLOGY AND THERAPEUTICS, (1994) 22/SUPPL. 11 (105-143)., XP000879086 abstract paragraph 2; example 7 ---	1, 2, 4, 5, 7, 12
X	LIEBOWITZ M R ET AL: "Reversible and irreversible monoamine oxidase inhibitors in other psychiatric disorders." ACTA PSYCHIATRICA SCANDINAVICA. SUPPLEMENTUM, (1990) 360 29-34. REF: 43, XP000879199 abstract paragraph 2; example 7 page 30, column 2, paragraph 3 - page 31, column 1, paragraph 2; example 7 ---	1, 2, 4, 7, 12
X	KENNEDY S H ET AL: "Is there a role for selective monoamine oxidase inhibitor therapy in bulimia nervosa? A placebo-controlled trial of brofaromine." JOURNAL OF CLINICAL PSYCHOPHARMACOLOGY, (1993 DEC) 13 (6) 415-22., XP000879189 abstract paragraph 2; example 7 ---	1, 2, 4, 8, 12
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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>PRINGUEY D. ET AL: "'Antidepressants!. ANTIDEPRESSEURS." REVUE DU PRATICIEN, (15 JAN 1999) 49/2 (209-214)., XP000879200 abstract paragraph 2; example 7; table 1 page 209, column 2, paragraph 2 - paragraph 2; example 7; table 1 ---</p>	1,2,4,8, 12
X	<p>THIEL A.: "'Is psychopharmacotherapy necessary in anorexia and bulimia nervosa?!. SIND PSYCHOPHARMAKA FUR DIE BEHANDLUNG DER ANOREXIA UND BULIMIA NERVOSA NOTWENDIG?." PPMP PSYCHOTHERAPIE PSYCHOSOMATIK MEDIZINISCHE PSYCHOLOGIE, (1997) 47/9-10 (332-345)., XP000879185 abstract paragraph 2; example 7; table 3 ---</p>	1,2,4,8, 12
X	<p>BENEDETTI M.S. ET AL: "Monoamine oxidase: From physiology and pathophysiology to the design and clinical application of reversible inhibitors." ADVANCES IN DRUG RESEARCH, (1992) 23/- (65-125)., XP000879188 page 90, paragraph 2 -page 91, paragraph 1; example 7; table 3 page 98, paragraph 1 -page 103, paragraph 2; example 7; table 3 page 108, paragraph 1 - paragraph 2; example 7; table 3 ---</p>	1,2,4,8, 12
X	<p>PRIEST, R. G. (1) ET AL: "Reversible and selective inhibitors of monoamine oxidase A in mental and other disorders." ACTA PSYCHIATRICA SCANDINAVICA, (1995) VOL. 91, NO. SUPPL. 386, PP. 40-43., XP000879201 abstract paragraph 2; example 7; table 3 ---</p>	1,2,4,8, 12
X	<p>WHITTAL M.C. ET AL: "Bulimia nervosa: A meta-analysis of psychosocial and pharmacological treatments." BEHAVIOR THERAPY, (1999) 30/1 (117-135)., XP000879168 abstract paragraph 2; example 7; table 1 ---</p>	1,2,4,8, 12
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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>REYNAERT C. ET AL: "Do new antidepressants influence body weight ? Comparing moclobemide to fluoxetine." EUROPEAN NEUROPSYCHOPHARMACOLOGY, (1993) 3/3 (354)., XP000879190</p> <p>page 354, paragraphs 5,6 - paragraph 2; example 7; table 1</p> <p>-----</p>	<p>1,2,4,8,12</p>

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

## Continuation of Box I.2

Present claims 1,2,4,7,12 relate to a use/product defined by reference to a desirable characteristic or property, namely reversible selective or reversible mixed monoamine oxidase A and/or B inhibitors.

The claims cover the use of all products/compounds having this characteristic or property, whereas the application provides support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT for only a very limited number of such products/compounds. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Independent of the above reasoning, the claims also lack clarity (Article 6 PCT). An attempt is made to define the product/compound by reference to a result to be achieved. Again, this lack of clarity in the present case is such as to render a meaningful search over the whole of the claimed scope impossible. Consequently, the search has been carried out for those parts of the claims which appear to be clear, supported and disclosed, namely those parts relating to the products/compounds specifically mentioned in the claims with due regard to the general idea underlying the present invention(s).

A compound or group of compounds is not sufficiently defined only by its pharmacological parameters or properties: for a fully valid definition of a compound or a group of compounds, a structural definition is needed. A complete search is virtually impossible because it is not exhaustively known which chemical compounds are comprised by the scope of the claims encompassing reversible selective or reversible mixed monoamine oxidase A and/or B inhibitors in general.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

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Information on patent family members

International Application No

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